

Substance for Success.



Product Guide L-G 1

Paint Additives

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Paint Additives

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Wetting and Dispersing Additives (deflocculating)

for Wetting and Stabilization of Pigments and to avoid Flooding/Floating

Additive	Composition	Non-volatile matter (%)	Solvents	Acid value (mg KOH/g)	Amine value (mg KOH/g)	Recommended for					
						Aqueous systems		Solvent-borne systems			Solvent-free
						Emulsions	Amine neutralized	Non-polar	Medium-polar	Polar	
ANTI-TERRA-U	Salt of polyamine amides and acidic polyesters	50	Xylene/Isobutanol 8/1	24	19			■	■	■	
ANTI-TERRA-U 80	Salt of polyamine amides and acidic polyesters	80	Butylglycol	40	30			■	■	■	
ANTI-TERRA-U 100	Salt of polyamine amides and acidic polyesters	>95	-	50	35			■	■	■	■
BYK-151	Alkylolammonium salt of a polymer	40	Water/Dipropylene glycol monomethylether 11/1	-	-	■					
BYK-155/50	Sodium salt of an acrylate copolymer	50	Water	-	-	■					
BYK-156	Ammonium salt of an acrylate copolymer	51	Water	-	-	■					
BYK-220 S	Polycarboxylic acid polyester	52	Alkylbenzenes	100	-			■	■	■	
BYK-9076	Alkylolammonium salt of a copolymer	96	-	38	44			■	■	■	■
BYK-9077	Block copolymer with basic pigment affinic groups	98	-	-	48			■	■	■	■
BYK-W 966	Salt of polyamine amides and acidic polyesters	52	Hydrocarbons	26	19			■	■	■	
DISPERBYK	Alkylolammonium salt of a polycarboxylic acid polymer	50	Water	85	85	■	■		■	■	
DISPERBYK-101	Salt of polyamine amides and an ester	52	White spirit/Butylglycol 8/1	30	14			■	■	■	
DISPERBYK-102	Copolymer with acidic groups	99	-	101	-		■	■	■	■	■
DISPERBYK-103	Copolymer	40	Methoxypropylacetate	-	-			■	■	■	
DISPERBYK-106	Salt of a polymer with acidic groups	91	-	132	74			■	■	■	■
DISPERBYK-107	Hydroxyfunctional carboxylic acid ester	90	Isoparaffinic hydrocarbons	-	64			■	■	■	
DISPERBYK-108	Hydroxyfunctional carboxylic acid ester	>97	-	-	71			■	■	■	■
DISPERBYK-109	High molecular weight alkylolamino amide	>98	-	-	140			■	■	■	■
DISPERBYK-110	Copolymer with acidic groups	52	Methoxypropylacetate/Alkylbenzenes 1/1	53	-			■	■	■	
DISPERBYK-111	Copolymer with acidic groups	>90	-	129	-			■	■	■	■
DISPERBYK-112	Acrylate copolymer with basic pigment affinic groups	60	Methoxypropylacetate	-	ca. 36			■	■	■	
DISPERBYK-115	Block copolymer with pigment affinic groups	52	Xylene/Butylacetate/Methoxypropylacetate 5/1/1	-	25			■	■	■	
DISPERBYK-116	Acrylate copolymer with basic pigment affinic groups	>98	-	-	65			■	■	■	■
DISPERBYK-130	Polyamine amides of unsaturated polycarboxylic acids	51	Alkylbenzenes/Butylglycol 5/1	<3	190			■	■	■	
DISPERBYK-140	Alkylolammonium salt of an acidic polymer	52	Methoxypropylacetate	73	76			■	■	■	
DISPERBYK-142	Phosphoric acid ester salt of a copolymer	60	Methoxypropylacetate	46	43			■	■	■	
DISPERBYK-145	Phosphoric acid ester salt of a copolymer	>95	-	76	71			■	■	■	■
DISPERBYK-160	Block copolymer with pigment affinic groups	29	Xylene/Butylacetate 6/1	-	12				■	■	
DISPERBYK-161	Block copolymer with pigment affinic groups	30	Methoxypropylacetate/Butylacetate 6/1	-	11				■	■	
DISPERBYK-162	Block copolymer with pigment affinic groups	38	Methoxypropylacetate/Xylene/Butylacetate 5/4/2	-	13				■	■	
DISPERBYK-163	Block copolymer with pigment affinic groups	45	Xylene/Butylacetate/Methoxypropylacetate 3/1/1	-	10			■	■	■	

Additive	Composition	Non-volatile matter (%)	Solvents	Acid value (mg KOH/g)	Amine value (mg KOH/g)	Recommended for					Solvent-free
						Aqueous systems		Solvent-borne systems			
						Emulsions	Amine neutralized	Non-polar	Medium-polar	Polar	
DISPERBYK-164	Block copolymer with pigment affinic groups	60	Butylacetate	–	18			■	■	■	
DISPERBYK-165	Block copolymer with pigment affinic groups	40	Butylacetate/Methoxypropylacetate/Isobutanol 3/2/1	–	14			■	■	■	
DISPERBYK-166	Block copolymer with pigment affinic groups	29.5	Butylacetate/Methoxypropylacetate 4/1	–	20			■	■	■	
DISPERBYK-167	Block copolymer with pigment affinic groups	52	Methoxypropylacetate/Butylacetate 2/1	–	13			■	■	■	
DISPERBYK-168	Block copolymer with pigment affinic groups	30	Dicarboxylic acid ester	–	11			■	■	■	
DISPERBYK-169	Block copolymer with pigment affinic groups	29.5	Butylacetate	–	18				■	■	
DISPERBYK-170	Block copolymer with pigment affinic groups	30	Methoxypropylacetate/Butylacetate 6/1	11	–			■	■	■	
DISPERBYK-171	Block copolymer with pigment affinic groups	39.5	Methoxypropylacetate/Butylacetate 4/1	13	–			■	■	■	
DISPERBYK-174	Block copolymer with pigment affinic groups	52.5	Xylene/Methoxypropylacetate/Butylacetate 3/2/1	22	–			■	■	■	
DISPERBYK-180	Alkylolammonium salt of a copolymer with acidic groups	81	–	94	94		■	■	■	■	■
DISPERBYK-181	Alkylolammonium salt of a polymer	65	Methoxypropylacetate/Propylene glycol/Methoxypropanol 5/3/2	33	33	■	■		■	■	
DISPERBYK-182	Block copolymer with pigment affinic groups	43	Methoxypropylacetate/Methoxypropoxypropanol/Butylacetate 7/4/4	–	13		■	■	■	■	
DISPERBYK-183	Block copolymer with pigment affinic groups	52	Tripropylene glycol monomethylether/Dipropylene glycol monomethylether 5/2	–	17		■	■	■	■	
DISPERBYK-184	Block copolymer with pigment affinic groups	52	Dipropylene glycol monomethylether/Propylene glycol 2/1	–	15		■				
DISPERBYK-185	Block copolymer with pigment affinic groups	>90	–	–	17		■	■	■	■	■
DISPERBYK-187	Alkylolammonium salt of a polymer	70	Propylene glycol/Methoxypropanol 1/1	35	35	■	■		■	■	
DISPERBYK-190	Block copolymer with pigment affinic groups	40	Water	10	–		■				
DISPERBYK-191	Acrylate copolymer	98	–	30	20		■				
DISPERBYK-192	Copolymer	>98	–	–	–		■				
DISPERBYK-194	Copolymer	53	Water	–	–		■				
DISPERBYK-2000	Acrylate blockcopolymer	40	Methoxypropylacetate/Butylglycol 1/1	–	4				■	■	
DISPERBYK-2001	Acrylate blockcopolymer	46	Methoxypropylacetate/Butylglycol/Methoxypropanol 2/2/1	19	29				■	■	
DISPERBYK-2008	Structured acrylic copolymer	100	–	–	66			■	■	■	■
DISPERBYK-2009	Structured acrylic copolymer	44	Butylglycol/Methoxypropylacetate 1/1	–	4			■	■	■	■
DISPERBYK-2010	Structured acrylic copolymer	40	Water	20	20	■	■				
DISPERBYK-2015	Structured acrylic copolymer	40	Water	10	–	■	■				
DISPERBYK-2020	Structured acrylic copolymer	70	Methoxypropylacetate	37	36				■	■	
DISPERBYK-2025	Structured acrylic copolymer	70	Methoxypropylacetate	38	37			■	■	■	
DISPERBYK-2050	Acrylate copolymer with basic pigment affinic groups	52	Methoxypropylacetate	–	30			■	■	■	
DISPERBYK-2070	Acrylate copolymer with pigment affinic groups	52	Methoxypropylacetate	40	20			■	■	■	
DISPERBYK-2150	Block copolymer with basic pigment affinic groups	52	Methoxypropylacetate	–	57			■	■	■	
DISPERBYK-2155	Block copolymer with pigmentaffinic groups	>99	–	–	48			■	■	■	■
DISPERBYK-2163	Block copolymer with pigmentaffinic groups	45	Xylene/Butylacetate/Methoxypropylacetate 3/1/1	–	10			■	■	■	
DISPERBYK-2164	Block copolymer with pigmentaffinic groups	60	Butylacetate/Methoxypropylacetate 2/3	–	13				■	■	
LACTIMON	Polycarboxylic acid polymer	50	Xylene/Isobutanol	60	13				■	■	
LACTIMON-WS	Polycarboxylic acid polymer	50	Butylglycol/Isobutanol/Water 5/4/1	43	23		■				

Wetting and Dispersing Additives (controlled flocculating)

for Wetting and Stabilization of Pigments and to avoid Settling, Sagging, and Flooding/Floating

Additive	Composition	Non-volatile matter (%)	Solvents	Acid value (mg KOH/g)	Amine value (mg KOH/g)	Recommended for					
						Aqueous systems		Solvent-borne systems			Solvent-free
						Emulsions	Amine neutralized	Non-polar	Medium-polar	Polar	
ANTI-TERRA-202	Alkylolammonium salt of a polycarboxylic acid	50	Stoddard solvent/ Butoxyethanol 9/1	51	51				■		
ANTI-TERRA-204	Polycarboxylic acid salt of polyamine amides	52	Methoxypropanol/ Alkylbenzenes 3/2	41	37			■	■		
ANTI-TERRA-205	Polycarboxylic acid salt of polyamine amides	52	Methoxypropanol/Isoparaffinic hydrocarbons 3/2	40	37			■	■		
ANTI-TERRA-207	Alkylolammonium salt of a polycarboxylic acid	80	Isobutanol/Methoxymethyl-ethoxypropanol 3/2	100	100		■		■	■	
ANTI-TERRA-P	Phosphoric acid salt of polyamine amides	42	Isobutanol/Xylene/Water 3/1/1	170	100			■	■	■	
BYK-P 104	Polycarboxylic acid polymer	50	Xylene/Diisobutylketone 9/1	180	–				■	■	
BYK-P 104 S	Polycarboxylic acid polymer	50	Xylene/Diisobutylketone 9/1	150	–				■	■	
BYK-P 105	Polycarboxylic acid polymer	98.5	–	365	–		■		■	■	■
BYKUMEN	Polycarboxylic acid polyester	46	White spirit/Isobutanol 3/2	35	–			■	■	■	

Wetting and Dispersing Additives for Universal Pigment Concentrates

Additive	Composition	Non-volatile matter (%)	Solvents	Acid value (mg KOH/g)	Recommended for		Properties
					Glycol pastes	VOC free pigment concentrates	
DISPERBYK-2090	Modified polyalkoxylate with acidic groups in a star like structure	81	Water	61	■	■	Stabilization of basic carbon blacks
DISPERBYK-2091	Modified polyalkoxylate with neutral groups in a star like structure	55	Water	15	■	■	Stabilization of organic and inorganic pigments
DISPERBYK-2095	Salt of polyamineamides and acidic polyesters	>98	–	36	■	■	Viscosity reduction in combination with DISPERBYK-2091
DISPERBYK-2096	Polar acidic esters of high molecular weight alcohols	99	–	40	■	■	To improve compatibility in non-polar coatings

Pigment Synergists

to Support Pigment Dispersion

Additive	Composition	Non-volatile matter (%)	Properties
BYK-SYNERGIST 2100	Insoluble pigment complex	100	For phthalocyanine pigments, violet pigments, and carbon blacks. Use always in combination with high molecular weight wetting and dispersing additives.
BYK-SYNERGIST 2105	Insoluble pigment complex	100	For organic red, yellow, and orange pigments. Use always in combination with high molecular weight wetting and dispersing additives.

Silicone Surface Additives

to Improve Substrate Wetting and Surface Slip

Additive	Composition	Reactive group	Non-volatile matter (%)	Active substance (%)	Solvents	Recommended for					
						Aqueous systems		Solvent-borne systems			Solvent-free
						Emulsions	Amine neutralized	Non-polar	Medium-polar	Polar	
BYK-300	Polyether modified polydimethylsiloxane		52		Xylene/Isobutanol 4/1			■	■	■	
BYK-301	Polyether modified polydimethylsiloxane		52		Butylglycol	■	■		■	■	
BYK-302	Polyether modified polydimethylsiloxane		>95		–	■	■	■	■	■	■
BYK-306	Polyether modified polydimethylsiloxane		12.5		Xylene/Monophenylglycol 7/2			■	■	■	
BYK-307	Polyether modified polydimethylsiloxane		>97		–			■	■	■	■
BYK-310	Polyester modified polydimethylsiloxane		25		Xylene			■	■	■	
BYK-315	Polyester modified polymethylalkylsiloxane		25		Methoxypropylacetate/Phenoxyethanol 1/1			■	■	■	
BYK-320	Polyether modified polymethylalkylsiloxane		52		White spirit/Methoxypropylacetate 9/1			■	■	■	
BYK-321	Polyether modified polymethylalkylsiloxane		51		Butoxyethanol			■	■	■	
BYK-322	Aralkyl modified polymethylalkylsiloxane		>98		–			■	■	■	■
BYK-323	Aralkyl modified polymethylalkylsiloxane		>96		–			■	■	■	■
BYK-325	Polyether modified polymethylalkylsiloxane		52		Alkylbenzenes/Butyrolacton 1/1			■	■	■	
BYK-330	Polyether modified polydimethylsiloxane		51		Methoxypropylacetate			■	■	■	
BYK-331	Polyether modified polydimethylsiloxane		>98		–			■	■	■	■
BYK-332	Polyether modified polydimethylsiloxane		>97		–	■	■	■	■	■	■
BYK-333	Polyether modified polydimethylsiloxane		>97		–	■	■	■	■	■	■
BYK-336	Polyether modified polydimethylsiloxane		25		Methoxypropanol acetate/Xylene 8/1			■	■	■	
BYK-337	Polyether modified polydimethylsiloxane		15		Dipropylene glycol monomethylether	■	■	■	■	■	
BYK-341	Polyether modified polydimethylsiloxane		51.5		Butylglycol	■	■	■	■	■	
BYK-344	Polyether modified polydimethylsiloxane		52		Xylene/Isobutanol 4/1			■	■	■	
BYK-345	Silicone surfactant		87.5		–		■				
BYK-346	Silicone surfactant		45		Dipropylene glycol monomethylether		■				
BYK-347	Silicone surfactant		85		–		■				
BYK-348	Silicone surfactant		>96		–		■				
BYK-349	Silicone surfactant		>94		–		■				
BYK-370	Polyester modified polydimethylsiloxane	OH	25		Xylene/Alkylbenzenes/Cyclohexanone/Monophenylglycol 75/11/7/7			■	■	■	
BYK-371	Polyester modified polydimethylsiloxane	Acrylic	40		Xylene			■	■	■	
BYK-373	Polyether modified polydimethylsiloxane	OH	52		Methoxypropanol			■	■	■	
BYK-375	Polyether-polyester modified polydimethylsiloxane	OH	25		Dipropylene glycol monomethylether	■	■				
BYK-377	Polyether modified polydimethylsiloxane	OH	>96		–			■	■	■	■
BYK-378	Polyether modified polydimethylsiloxane		>96		–	■	■	■	■	■	■
BYK-SILCLEAN 3700	Silicone modified polyacrylate	OH	25		Methoxypropylacetate			■	■	■	
BYK-SILCLEAN 3710	Polyether modified polydimethylsiloxane	Acrylic	>96		–		■	■	■	■	■
BYK-SILCLEAN 3720	Polyether modified polydimethylsiloxane	OH	25		Methoxypropanol		■				
BYK-UV 3500	Polyether modified polydimethylsiloxane	Acrylic	>96		–		■	■	■	■	■
BYK-UV 3510	Polyether modified polydimethylsiloxane		>97		–			■	■	■	■
BYK-3520	Organically modified polydimethylsiloxane			100		■	■				
BYK-3521	Organically modified polydimethylsiloxane			100		■	■				
BYK-UV 3530	Polyether modified polydimethylsiloxane	Acrylic	>96		–		■				■
BYK-UV 3570	Polyester modified polydimethylsiloxane	Acrylic	70		PONPGDA*						■

* Propoxylated Neopentylglycoldiacrylate

Acrylate Leveling Additives, liquid

Additive	Composition	Non-volatile matter (%)	Solvents	Leveling	Air release, Defoaming	Anti-popping	Substrate wetting, Anticrater effect	Recommended for				Remarks
								Aqueous systems	Solvent-borne systems	Solvent-free systems	Master-batch resins for powder coatings	
BYK-340	Polymeric fluoro surfactant	10	Dipropylene glycol monomethylether	■			■	■	■			
BYK-350	Polyacrylate	100	–	■					■	■		
BYK-352	Polyacrylate	80	Methoxypropanol	■					■			
BYK-354	Polyacrylate	51	Alkylbenzenes/ Diisobutylketone 9/1	■	■				■			
BYK-355	Polyacrylate	52	Methoxypropyl-acetate	■					■			
BYK-356	Polyacrylate	>98	–	■					■	■	■	Solvent-free version of BYK-355
BYK-358 N	Polyacrylate	52	Alkylbenzenes	■					■			
BYK-359	Polyacrylate	>99	–	■					■	■	■	
BYK-361 N	Polyacrylate	>98	–	■					■	■	■	Solvent-free version of BYK-358 N
BYK-380 N	Acrylate copolymer	52	Dipropylene glycol monomethylether	■			■	■	■			
BYK-381	Polyacrylate, ionic	52	Dipropylene glycol monomethylether	■				■				
BYK-388	Fluoro modified polyacrylate	70	Dipropylene glycol monomethylether	■			■		■	■		
BYK-390	Polyacrylate	52	Xylene		■	■						
BYK-392	Polyacrylate	52	Methoxypropyl-acetate	■	■	■						
BYK-394	Polyacrylate	80	Dipropylene glycol monomethylether	■					■	■		Foil release

Acrylate Leveling Additives, powder form

Additive	Composition	Residue after calcining (%)	Acrylate content (%)	Leveling	Anticrater effect	Pigment wetting	Recommended for	Remarks
							Powder coatings	
BYK-360 P	Polyacrylate, adsorbed on silicon dioxide	39	57	■	■		■	
BYK-364 P	Polyacrylate, adsorbed on silicon dioxide	37	60	■	■	■	■	OH reactive
BYK-366 P	Polyacrylate, adsorbed on silicon dioxide	34	63	■	■		■	
BYK-368 P	Polyacrylate, adsorbed on silicon dioxide	34	63	■	■		■	
BYK-3900 P	Polyacrylate, adsorbed on silicon dioxide	34	63	■	■		■	Enhanced acceptance of impurities
BYK-3931 P	Polyacrylate, adsorbed on silicon dioxide	34	63		■		■	Synergist, Used in combination with standard leveling additives

Nano Surface Additives for Improved Scratch Resistance

Additive	Composition	Non-volatile matter (%)	Particle content (%)	Carrier	Particle size D50 (nm)	Recommended for			Application areas
						UV systems		Conventional systems, solvent-borne	
						Aqueous	Solvent-free		
NANOBYK-3600*	Aluminium oxide nanoparticles	55	50	Water	40	■			Parquet and furniture coatings
NANOBYK-3601*	Aluminium oxide nanoparticles	97	30	TPGDA	40		■		Parquet/furniture and industrial coatings
NANOBYK-3602*	Aluminium oxide nanoparticles	97	30	HDDA	40		■		Parquet/furniture and industrial coatings
NANOBYK-3610	Aluminium oxide nanoparticles, surface-modified with polysiloxane	37	30	Methoxypropyl-acetate	20		■	■	Wood and furniture coatings, industrial coatings, plastic coatings
NANOBYK-3650	Silica nanoparticles, surface-modified with polysiloxane	31	25	Methoxypropyl-acetate/ Methoxy-propanol 6/1	20			■	Wood and furniture coatings, industrial coatings, automotive refinish coatings
NANOBYK-3651	Silica nanoparticles, surface-modified with polysiloxane	34	20	Methoxypropylacetate/ Methoxypropanol 6/1	20			■	Wood and furniture coatings, industrial coatings, automotive coatings
NANOBYK-3652	Silica nanoparticles, surface-modified with polysiloxane	31	25	Methoxypropylacetate/ Methoxypropanol 6/1	20			■	Wood and furniture coatings, industrial coatings, automotive coatings

* For enhanced effectivity the combination with standard silicone surface additives is recommended.

TPGDA = Tripropylene glycol diacrylate

HDDA = Hexanedioldiacrylate

Wax Emulsions and Dispersions in Water

Additive	Wax base	Non-volatile matter (%)	Carrier	Emulsifier system	Melting point (wax component) °C	Mechanical resistance	Surface slip	Anti-Slip	Anti-blocking, Water repellence	Anti-settling	Soft-Feel-Effect	Gloss reduction	Orientation of effect pigments	Application areas
AQUACER 498	Paraffin wax	50	Water	Non-ionic	60		■		■					Printing inks, architectural coatings
AQUACER 507	Oxidized HDPE wax	35	Water	Anionic	130	■							■	Automotive coatings
AQUACER 513	Oxidized HDPE wax	35	Water	Non-ionic	135	■								Printing inks, wood, architectural and industrial coatings
AQUACER 515	Oxidized HDPE wax	35	Water	Non-ionic	135	■								Printing inks, wood, architectural and industrial coatings
AQUACER 526	Modified EVA copolymer-wax	30	Water	Anionic	105								■	Automotive coatings
AQUACER 531	Modified PE wax	45	Water	Non-ionic	130	■			■					Printing inks
AQUACER 533	Modified paraffin wax	40	Water	Anionic	95	■	■		■					Architectural coatings
AQUACER 535	Modified paraffin wax	30	Water	Non-ionic	105		■		■					Wood, architectural and industrial coatings
AQUACER 537	Modified paraffin wax	30	Water	Anionic	110		■		■					Wood, architectural and industrial coatings
AQUACER 539	Modified paraffin wax	35	Water	Non-ionic	90		■		■					Printing inks, wood, architectural and industrial coatings
AQUACER 552	Oxidized HDPE wax	35	Water	Non-ionic	130	■								Printing inks
AQUACER 560	Modified bees wax	15	Water	–	70				■					For wax stains to enhance the color difference between sap and heart wood
AQUACER 593	Modified PP wax	30	Water	Non-ionic	160			■						Wood coatings, printing inks
AQUACER 840	Oxidized HDPE wax	30	Water	Cationic	135								■	Automotive and industrial coatings
AQUACER 1547	Oxidized HDPE wax	35	Water	Anionic	125	■								Can coatings
AQUAMAT 208	Oxidized HDPE wax	35	Water	–	135	■					■	■		Wood, and architectural coatings
AQUAMAT 263	Oxidized HDPE wax	35	Water/Dipropylene glycol monomethyl ether 12/1	–	130	■			■		■	■		Printing inks
AQUAMAT 270	Modified PE wax	55	Water	–	125	■			■		■	■		Wood, architectural and industrial coatings
AQUATIX 8421	Modified EVA copolymer wax	20	Water	Non-ionic	105					■			■	Automotive coatings, industrial coatings

PE = Polyethylene PP = Polypropylene HDPE = High Density Polyethylene EVA = Ethylene-Vinylacetate

Wax Dispersions in Organic Solvents

Additive	Wax base	Non-volatile matter (%)	Solvents	Melting point (wax component) °C	Mechanical resistance	Surface slip	Anti-blocking, Water repellence	Anti-settling	Soft-feel effect	Gloss reduction	Orientation of effect pigments	Application areas
CERACOL 39	PE wax	40	Ethanol	105	■		■					Printing inks
CERACOL 79	Carnauba wax	20	Dipropylene glycol monomethylether	90	■	■						Can coatings
CERACOL 600	Modified hydrocarbon wax	20	Methoxypropylacetate	100	■	■						Coil coatings
CERACOL 601	Carnauba wax	20	Dipropylene glycol monomethylether	90	■	■						Can/Coil coatings
CERACOL 603	Polymer/PTFE mixture	20	Butylglycol	100	■	■						Can coatings
CERACOL 604	Carnauba wax	11,5	Butylglycol	85	■	■						Can coatings
CERACOL 607	PTFE-modified PE wax	35	Butyldiglycolacetate/ Butyldiglycol/Aromatic hydrocarbons	105	■	■						Can/Coil coatings
CERACOL 609N	Wax modified Lanolin	20	Aromatic hydrocarbons/ Isopropanol 1/1	85	■	■						Can/Coil coatings
CERAFAK 100	EVA Copolymer wax	10	Xylene/Butylacetate 1/1	105				■			■	Industrial coatings
CERAFAK 103	EAA Copolymer wax	6	Xylene/Butylacetate/ Butanol 7/8/1	110				■			■	Automotive coatings
CERAFAK 106	EVA Copolymer wax	6	Xylene/Butylacetate/ Butanol 7/8/1	105				■			■	Automotive coatings
CERAFAK 110	EVA Copolymer wax	6	Butylacetate/Butanol 15/1	100				■			■	Automotive and industrial coatings
CERAFAK 111	PE wax	12.5	Butylacetate	110	■			■			■	Automotive and industrial coatings
CERAFAK 116	Modified FT wax	25	Aromatic-free white spirit	110			■					Architectural coatings
CERAFAK 127N	FT wax	15	Aromatic hydrocarbons	120	■	■	■					Can/Coil coatings, architectural and industrial coatings
CERAFAK 131	PE wax	12.5	Xylene	115	■				■			Wood coatings
CERAFAK 140N	Carnauba wax	15	Isobutanol/Aromatic hydrocarbons 13/4	90	■	■						Can coatings
CERAFAK 180N	Carnauba wax	20	Aromatic hydrocarbons	85	■	■						Industrial coatings
CERAFAK 184	Modified hydrocarbon wax	13.5	Butanol/White spirit 1/1	100	■	■						Can coatings
CERAFAK 186N	Hydrocarbon wax	15	Aromatic hydrocarbons	95	■	■						Industrial coatings
CERAMAT 241	Oxidized HDPE wax	22	Xylene/Butylacetate 1/1	135	■			■	■	■	■	Wood coatings
CERAMAT 248	PE wax	20	Aromatic-free white spirit	110	■					■		Architectural coatings
CERAMAT 250	PE wax	40	Butylacetate	120	■			■	■	■		Wood coatings
CERAMAT 258	Oxidized HDPE wax	17.5	Butylacetate	135	■			■	■	■		Can coatings, wood and industrial coatings
CERATIX 8461	EVA Copolymer wax	4.7	Xylene/Butylacetate/ Butanol 3/6/1	105				■			■	Automotive, wood and industrial coatings
CERATIX 8463	EVA/EAA Copolymer wax mixture	4.4	Xylene/Butylacetate/ Butanol 3/6/1	110				■			■	Automotive coatings
CERATIX 8466	EVA Copolymer wax	4.7	Butylacetate/Butanol 9/1	100				■			■	Automotive, wood and industrial coatings
MINERPOL 220	PE wax	90	Linseed oil/Mineral oil	120	■		■					Offset printing inks
MINERPOL 221	PE wax	>98	Linseed oil	120	■		■					Offset printing inks

PE = Polyethylene HDPE = High Density Polyethylene PTFE = Polytetrafluorethylene FT = Fischer-Tropsch EVA = Ethylene-Vinylacetate EAA = Ethylene-Acrylic acid

Micronized Wax Additives

Additive	Wax base	Particle size (µm)			Melting point (wax component)	Mechanical resistance	Surface slip	Anti-Slip	Soft-feel effect	Gloss reduction	Sandability	Structure/Texture	Out-gassing of powder coatings	Pigment wetting in powder coatings	Coating systems			Application areas	
		D10	D50	D90											Powder coatings	Solvent-borne	Aqueous		
AQUAFLOUR 400	Modified PE wax/polymer mixture	1	6	14	115	■			■								■	Wood, architectural, industrial coatings	
CERAFLOUR 913	PP wax	7	18	31	160			■	■		■					■	■	Wood and industrial coatings	
CERAFLOUR 914	PP wax	12	24	36	160			■	■		■					■	■	Wood and industrial coatings	
CERAFLOUR 915	PP wax	14	34	57	160			■			■					■	■	Wood and industrial coatings	
CERAFLOUR 916	Modified HDPE wax/polymer mixture	17	46	82	135						■						■	■	Wood and industrial coatings
CERAFLOUR 920	Organic polymer	1	5	13	-	■			■						■	■	■	Printing inks, wood, architectural, industrial coatings	
CERAFLOUR 928	Modified PE wax	2	8	15	115	■			■								■	■	Wood and industrial coatings, Can coatings, overprint varnishes
CERAFLOUR 940	FT wax	2	6	12	115	■											■		Printing inks
CERAFLOUR 950	Modified HDPE wax	2	9	15	135	■		■	■							■	■		Printing inks, wood, industrial coatings
CERAFLOUR 960	Modified amide wax	1	4	11	145							■	■	■	■				Powder coatings
CERAFLOUR 961	Modified PE wax	2	5	10	140	■	■						■		■				Powder coatings
CERAFLOUR 962	Modified PE wax	2	9	24	140	■	■						■		■				Powder coatings
CERAFLOUR 965	PTFE	8	31	80	-						■				■				Powder coatings
CERAFLOUR 967	Synthetic polymer	-	-	300	-						■				■				Powder coatings
CERAFLOUR 968	PTFE modified PE wax	2	6	11	115						■				■				Powder coatings
CERAFLOUR 969	PTFE modified PE wax	2	6	14	115						■				■				Powder coatings
CERAFLOUR 970	PP wax	2	9	14	160			■	■						■	■			Wood and industrial coatings
CERAFLOUR 981	PTFE	1	3	8	-	■										■	■		Can/Coil coatings, wood and industrial coatings
CERAFLOUR 988	Amide modified PE wax	1	6	13	140	■		■	■								■		Wood and industrial coatings
CERAFLOUR 990	PE wax	3	6	12	115	■	■	■	■						■	■			Architectural and industrial coatings
CERAFLOUR 991	PE wax	2	5	9	115	■	■	■	■						■	■			Can/Coil coatings, wood and industrial coatings
CERAFLOUR 993	Amide wax	3	13	31	145					■		■	■	■	■	■			Wood and industrial coatings
CERAFLOUR 994	Amide wax	1	5	10	145					■		■	■	■	■	■			Can coatings, wood and industrial coatings
CERAFLOUR 995	PE wax/Amide wax mixture	2	6	11	140	■		■	■			■	■	■	■	■			Wood, architectural, industrial coatings
CERAFLOUR 996	PTFE modified PE wax	2	6	11	115	■	■								■	■			Can/Coil coatings, wood, architectural, industrial coatings
CERAFLOUR 997	PTFE modified PE wax	2	7	13	115	■	■								■	■			Can/Coil coatings, wood coatings, architectural coatings, industrial coatings
CERAFLOUR 998	PTFE modified PE wax	2	5	9	115	■	■								■	■			Coil/Can coatings, wood, architectural, industrial coatings

PE = Polyethylene HDPE = High Density Polyethylene PP = Polypropylene PTFE = Polytetrafluorethylene FT = Fischer-Tropsch

Silicone Defoamers

Additive	Composition				Non-volatile matter (%)	Recommended for					Properties/Application areas	
	Poly-siloxane	Hydrophobic particles	Polymers	Solvents/Carrier		Aqueous systems		Solvent-borne systems				Solvent-free
						Emulsions	Amine-neutralized	Non-polar	Medium-polar	Polar		
BYK-017	■	■		–	>98	■	■					Millbase defoamer for glycol pastes and aqueous pigment concentrates
BYK-018	■	■		–	>97	■						Specifically for emulsion lacquers with low PVC
BYK-019	■			Dipropylene glycol monomethylether	60	■						For PU and PU/Acrylate systems
BYK-020	■			Butylglycol/Ethylhexanol/White spirit 6/2/1	10		■					Also for aqueous UV systems
BYK-021	■	■		Polyglycol	>97	■						PVC 18-25, also for airless application
BYK-022	■	■		Polyglycol	>97	■	■					PVC 18-25, highly effective against micro foam
BYK-023	■	■		Water	18.5	■	■					PVC 30-50
BYK-024	■	■		Polyglycol	>96	■	■					PVC 0-25
BYK-025	■			Dipropylene glycol monomethylether	18.5	■	■					Very easy incorporation (specifically for curtain coaters)
BYK-028	■	■		Polyglycol	>98	■	■					Standard silicone defoamer for aqueous systems
BYK-044	■	■		Water	57	■	■					Millbase defoamer for glycol pastes and aqueous pigment concentrates
BYK-045	■	■		Water	8.5	■						For plasters and non-pigmented systems
BYK-060 N	■		■	Diisobutylketone	2.8			■	■	■		Broad effectivity in solvent-borne systems
BYK-065	■			Cyclohexanone	0.7			■	■	■		
BYK-066 N	■			Diisobutylketone	0.7			■	■	■		Standard silicone defoamer for solvent-borne systems
BYK-067 A	■			Propylene glycol	89			■	■	■	■	Solvent-free and odor-free version of BYK-066 N
BYK-070	■		■	Xylene/Methoxypropylacetate/Butylacetate 10/2/1	9				■	■		For solvent-borne systems with medium to high polarity
BYK-071	■			Xylene	3.5			■	■			Specifically for low polar wood coatings
BYK-072	■			Xylene/Butanol/Methylisobutylketone 2/1/1	1			■	■	■		Complies with FDA § 175.300
BYK-077	■			Alkylbenzenes	52			■	■	■		Gives also good leveling
BYK-080 A	■			Propylene glycol	87.5		■		■	■		
BYK-085	■			–	>98			■	■	■	■	Solvent-free version of BYK-077
BYK-088	■		■	Isoparaffine	3.3			■	■	■		Complies with FDA § 175.300
BYK-093	■	■		Polyglycol	>98	■	■					Excellent effectivity and broad compatibility
BYK-094	■	■		Polyglycol	>96		■					
BYK-141	■			Alkylbenzenes/Isobutanol 11/2	3.2				■	■		
BYK-1610	■	■		Water	17	■						Emulsion paints with medium PVC, also emulsion plasters
BYK-1615	■	■		Water	12.5	■						Highly filled emulsion paints
BYK-1650	■	■		Water	27.5	■						Emulsions paints with medium PVC (35-70)
BYK-1660	■			Water	27.8	■						High gloss emulsion systems (PVK 20-50)
BYK-1730	■	■		Polyglycol	99.2	■	■					VOC free
BYK-1770	■			–	>96	■						High build systems (joinery)
BYK-A 530	■		■	Mixture of hydrocarbons	5			■	■	■	■	Specifically for epoxy systems

Polymer Defoamers (silicone-free)

Additive	Composition			Non-volatile matter (%)	Recommended for					Properties/Application areas	
	Hydrophobic particles	Polymers	Solvents		Aqueous systems		Solvent-borne systems				Solvent-free
					Emulsions	Amine neutralized	Non-polar	Medium-polar	Polar		
BYK-011	■	■	Hydrocarbons/Ethylhexanol 21/1	29		■					Excellent effectivity in aqueous 2-pack PU systems
BYK-012	■	■	–	>96	■						Emulsion paints and plasters with a PVC of 30-85
BYK-016	■	■	–	>99		■					Industrial coatings and printing inks
BYK-051		■	White spirit/Glycolic acid butylester/Butylglycol 71/8/1	20				■	■		Better compatibility than BYK-052, reduced effectivity
BYK-052		■	White spirit/Glycolic acid butylester/Butylglycol 71/8/1	20				■	■	■	Standard defoamer for industrial and architectural coatings (also available without aromatic solvents as BYK-1752)
BYK-053		■	White spirit/Glycolic acid butylester/Butylglycol 71/8/1	20				■	■	■	Less compatible than BYK-052, better effectivity
BYK-054		■	Isoparaffine	25				■	■	■	Especially for 2-pack PU and epoxy systems
BYK-1752		■	Isoparaffine	20				■	■	■	Version of BYK-052 without aromatic solvents
BYK-1790		■	–	100				■	■	■	Specifically for solvent-free radiation curing systems
BYK-A 500		■	Alkylbenzenes/Methoxypropylacetate 12/1	6.5				■	■		Especially for polyester systems (wood and furniture coatings)
BYK-A 501		■	Alkylbenzenes/Methoxypropylacetate 8/1	44				■	■		Also for air release and better leveling
BYK-A 535		■	–	> 99				■	■	■	Especially for 2-pack PU and epoxy systems

Mineral Oil Defoamers

Additive	Composition					Non-volatile matter (%)	Recommended for					Recommended PVC range	
	Paraffin based mineral oils	Hydrophobic particles	Water	Poly-siloxane	Alkyl-phenol-ethoxylate		Emulsion paints, exterior wall paints	Emulsion plasters	Emulsion adhesives	Industrial emulsions	Emulsion lacquers		Production of emulsion binders
BYK-031	■	■	■			53		■					50-85
BYK-033	■	■			■	>97	■	■	■	■			35-70
BYK-034	■	■		■	■	>97	■			■	■	■	20-70
BYK-035	■	■		■		>97					■		20-40
BYK-037	■	■	■	■		53.5	■	■				■	50-85
BYK-038	■	■		■		>96	■			■	■	■	20-70

Rheology Additives (liquid)

Additive	Composition	Non-volatile matter (%)	Active substance (%)	Solvents	Recommended for			Properties/Application areas	
					Aqueous systems	Solvent-borne systems			
					Non-polar	Medium-polar	Polar		
BYK-405	Polyhydroxycarboxylic acid amides	52		Xylene/Alkylbenzenes/Isobutanol 5/4/1		■	■	■	Enhances thixotropy in systems that contain pyrogenic silica
BYK-410	Modified urea	52		N-Methylpyrrolidone			■	■	Creates thixotropy. Avoids settling/sagging while maintaining good leveling and air release
BYK-411	Modified urea	27		N-Methylpyrrolidone		■	■		Creates thixotropy. Avoids settling/sagging while maintaining good leveling and air release
BYK-420	Modified urea	52		N-Methylpyrrolidone	■				Creates thixotropy. Especially useful to avoid settling in aqueous pigment slurries
BYK-425	Urea modified polyurethane		50	Polypropylene glycol 600	■				Creates pseudoplasticity; fast viscosity recovery after shearing gives excellent sag resistance
BYK-428	Highly branched polyurethane		25	Water/Ethoxylates	■				High shear thickener
BYK-430	High molecular urea modified medium polar polyamide	30		Isobutanol/Solvent naphtha 9/1			■		Creates pseudoplasticity; fast viscosity recovery after shearing gives excellent sag resistance
BYK-431	High molecular urea modified non polar polyamide	25		Isobutanol/Monophenylglycol 9/1		■			Creates pseudoplasticity; fast viscosity recovery after shearing gives excellent sag resistance
BYK-E 410	Modified urea	52		N-Ethylpyrrolidone			■	■	NMP free version of BYK-410
BYK-E 411	Modified urea	27		N-Ethylpyrrolidone		■	■		NMP free version of BYK-411
BYK-E 420	Modified urea	52		N-Ethylpyrrolidone	■				NMP free version of BYK-420

Inorganic UV Absorbers

Additive	Composition	Non-volatile matter (%)	Carrier	Particle content (%)	Particle size D50 (nm)	Recommended for		Application areas
						Aqueous systems	Solvent-borne systems	
NANOBYK-3810	Cerium oxide nanoparticles	22	Water	18	10	■		Wood care
NANOBYK-3812	Cerium oxide nanoparticles	47	Aromatic-free white spirits	30	10		■	Wood care
NANOBYK-3820	Zinc oxide nanoparticles	45	Water	40	20	■		Transparent wood and furniture coatings, Transparent architectural coatings (wood care)
NANOBYK-3821	Zinc oxide nanoparticles	44	Methoxy-propylacetate	40	20		■	Solvent-borne wood and industrial coatings
NANOBYK-3840	Zinc oxide nanoparticles	44	Water	40	40	■		Transparent wood and furniture coatings, Transparent architectural coatings (wood care)
NANOBYK-3841	Zinc oxide nanoparticles	44	Methoxy-propylacetate	40	40		■	Wood care
NANOBYK-3842	Zinc oxide nanoparticles	47	Aromatic-free white spirits	40	40		■	Wood care
NANOBYK-3860	Zinc oxide nanoparticles	55	Water	50	60	■		Pigmented systems, Thin transparent architectural coatings (wood care)

All UV absorbers can be used in combination with radical scavengers (HALS).

Adhesion Promoters

Additive	Composition	Acid value (mg KOH/g)	Non-volatile matter (%)	Solvents	Recommended for			Application areas
					Aqueous systems		Solvent-borne baking systems	
					Emulsions	Amine neutralized		
BYK-4500	High molecular weight block copolymer	–	40	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	■	■		Aqueous decorative coatings that are applied onto aged pigmented alkyd paints
BYK-4510	Copolymer with acidic groups	30	80	Methoxypropanol		■	■	Baking systems for metallic substrates

Other Additives

Additive	Composition	Non-volatile matter (%)	Acid content (%)	Solvents	Acid value (mg KOH/g)	Amine value (mg KOH/g)	Recommended for				Properties	
							Aqueous systems	Solvent-borne systems				Powder coatings
								Non-polar	Medium-polar	Polar		
BYK-3950 P	Copolymer with pigment affinic groups	100	–	–	–	–				■	Processing additive	
BYK-3951 P	Copolymer with pigment affinic groups	100	–	–	–	–				■	Processing additive	
BYK-CATALYST 450	Amine salt of para-toluene sulfonic acid	26.5	20	Methoxypropanol/ Propylene glycol/ Water 64/5/3	60	10	■	■	■	■		Blocked acid catalyst
BYK-CATALYST 451	Amine salt of para-toluene sulfonic acid	26.5	20	Propanol/ Methanol/ Water 58/10/2	60	10	■	■	■	■		
BYK-ES 80	Alkylolammonium salt of an unsaturated acidic carboxylic acid ester	–	–	Isobutanol	140	140		■	■	■		Increases conductivity for electrostatic application
BYKANOL-N	Alkylolammonium salt of acidic phosphoric acid esters + ketoxime	8.5	–	Isobutanol/ Xylene/Water 10/6/1	16	17		■	■	■		Anti-gelling additive and viscosity stabilizer
BYKETOL-AQ	Combination of surface active low molecular weight polymers	4	–	Methoxypropanol	–	–	■					Avoids surface defects in aqueous systems
BYKETOL-OK	Combination of high boiling solvents	<1	–	Alkylbenzenes/ Diisobutylketone/ Dipentene	–	–		■	■	■		Avoids surface defects in architectural and industrial coatings
BYKETOL-PC	Modified urea	90	–	Water	–	–	■					Reduces drying and caking of aqueous pigment concentrates
BYKETOL-Special	Combination of high boiling solvents	<1	–	Alkylbenzenes/ Diisobutylketone	–	–		■	■	■		Avoids surface defects in architectural and industrial coatings; contains silicone
BYKETOL-WS	Combination of surface active low molecular weight polymers	4	–	Butylglycol	–	–	■					Avoids surface defects in aqueous systems

Products and Applications

BYK Additives

Additives are used during the production of coatings, printing inks and plastics to optimize the production process and to improve the quality of the final product.

Product Range Additives

- Additives to improve surface slip, leveling and substrate wetting
- Adhesion promoters
- Defoamers and air release agents
- Foam stabilizers
- Processing additives
- Rheological additives
- UV-absorbers
- Viscosity depressants
- Waxes
- Wetting and dispersing additives for pigments and extenders

Application Areas

- Ambient curing resins (FRP)
- Architectural coatings
- Automotive OEM
- Automotive refinishes
- Can coatings
- Coil coatings
- Color masterbatches
- Industrial coatings
- Leather coatings
- Marine paints
- Molding compounds
- Paper coatings
- Pigment concentrates
- Polyurethane foams
- Powder coatings
- Printing inks
- Protective coatings
- PVC plastisols
- Thermoplastics
- Wood and furniture coatings

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